

FILEID**LOCKDN

L 2

LL 000000 000000 CCCCCCCC KK KK DDDDDDDD NN NN
LL 000000 000000 CCCCCCCC KK KK DDDDDDDD NN NN
LL 00 00 CC KK KK DD DD DD NN NN NN
LL 00 00 CC KK KK DD DD DD NNNN NN NN
LL 00 00 CC KK KK DD DD DD NNNN NN NN
LL 00 00 CC KKKKKK DD DD DD NN NN NN NN
LL 00 00 CC KKKKKK DD DD DD NN NN NN NN
LL 00 00 CC KK KK DD DD DD NN NN NNNN
LL 00 00 CC KK KK DD DD DD NN NN NNNN
LL 00 00 CC KK KK DD DD DD NN NN NN
LL 00 00 CC KK KK DD DD DD NN NN NN
LLLLLLLLLL 000000 000000 CCCCCCCC KK KK DDDDDDDD NN NN NN
LLLLLLLLLL 000000 000000 CCCCCCCC KK KK DDDDDDDD NN NN NN

LL IIIII SSSSSSSS
LL IIIII SSSSSSSS
LL II SS SS
LLLLLLLLLL IIIII SSSSSSSS
LLLLLLLLLL IIIII SSSSSSSS

LOCK
V04-

0000 1 .TITLE LOCKDN - LOCK FCP INTO REAL MEMORY
0000 2 .IDENT 'V04-000'
0000 3 :*****
0000 4 :
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0000 24 :
0000 25 :
0000 26 :*****
0000 27 :
0000 28 :++
0000 29 :
0000 30 : FACILITY: F11ACP STRUCTURE LEVEL 1
0000 31 :
0000 32 : ABSTRACT:
0000 33 :
0000 34 : THIS ROUTINE TOUCHES ALL OF THE PAGES IN FCP TO BRING THEM
0000 35 : INTO REAL MEMORY.
0000 36 :
0000 37 : ENVIRONMENT:
0000 38 :
0000 39 : STARLET OPERATING SYSTEM, INCLUDING PRIVILEGED SYSTEM SERVICES
0000 40 : AND INTERNAL EXEC ROUTINE.
0000 41 :
0000 42 : AUTHOR: ANDREW C. GOLDSTEIN, CREATION DATE: 22-DEC-1976 14:46
0000 43 :
0000 44 : MODIFIED BY:
0000 45 :
0000 46 : B0100 ACG00001 Andrew C. Goldstein, 10-Oct-1978 20:01
0000 47 : Previous revision history moved to [F11B.SRC]F11B.REV
0000 48 :**
0000 49 :
0000 50 :
0000 51 : DEFINE LABELS FOR THE START AND END OF THE LOCKED DOWN AREAS
0000 52 :
0000 53 : .PSECT \$LOCKEDC0\$,NOWRT,PAGE
0000 54 : LCODE_START:
0000 55 :
0000 56 : .PSECT \$LOCKEDC9\$,NOWRT,LONG
0000 57 : LCODE_END:

0000 58
00000000 59 .PSECT \$LOCKEDDOS\$,NOEXE,LONG
0000 60 LDATA_START:
0000 61
00000000 62 .PSECT \$LOCKEDD9\$,NOEXE,LONG
0000 63 LDATA_END:
0000 64
00000000 65 .PSECT \$LOCKEDD1\$,NOEXE,LONG
0000 66 :
0000 67 : OWN STORAGE:
0000 68 :
00000004 69 WORKING_SET: .BLKL 1 ; SPACE TO RECEIVE WORKING SET SIZE
00000046 70 SET_SIZE:: .LONG 70 ; SIZE TO ADJUST WORKING SET TO
00000010 71 LAST_PAGE: .BLKL 2 ; SPACE TO RECEIVE LAST PAGE POINTERS
0010 72
0010 73 :
0010 74 : DESCRIPTORS TO LOCK DOWN THE CODE AND DATA AREAS THAT ARE TO BE LOCKED INTO
0010 75 : THE WORKING SET
0010 76 :
00000000 77 .PSECT \$CODE\$,NOWRT,LONG
0000 78
FFFFFFFFFF'00000000' 79 LOCKED_CODE: .LONG LCODE_START,LCODE_END-1
FFFFFFFFFF'00000000' 80 LOCKED_DATA: .LONG LDATA_START,LDATA_END-1

```

0010    82 :++
0010    83 .:+
0010    84 .: FUNCTIONAL DESCRIPTION:
0010    85 .
0010    86 .: THIS ROUTINE TOUCHES ALL OF THE PAGES IN FCP TO BRING THEM
0010    87 .: INTO REAL MEMORY.
0010    88 .
0010    89 .: CALLING SEQUENCE:
0010    90 .:   CALL LOCKDOWN ()
0010    91 .:   NONE
0010    92 .
0010    93 .: INPUT PARAMETERS:
0010    94 .:   NONE
0010    95 .
0010    96 .: IMPLICIT INPUTS:
0010    97 .:   NONE
0010    98 .
0010    99 .: OUTPUT PARAMETERS:
0010   100 .:   NONE
0010   101 .
0010   102 .: IMPLICIT OUTPUTS:
0010   103 .:   NONE
0010   104 .
0010   105 .: ROUTINE VALUE:
0010   106 .:   NONE
0010   107 .
0010   108 .: SIDE EFFECTS:
0010   109 .:   ALL OF FCP RESIDING IN REAL MEMORY
0010   110 .
0010   111 :--
0010   112 .
0010   113 .: LOCKDOWN:
0010   114 .:   WORD  ^M<>
0012   115 .
0012   116 .: ADJUST THE WORKING SET SIZE TO A SUITABLE VALUE
0012   117 .
0012   118 .: SADJWSL_S #0,W^WORKING_SET : READ CURRENT SIZE
0012   119 .: SUBL3 W^WORKING_SET,W^SET_SIZE,RO : COMPUTE INCREMENT
0027   120 .: SADJWSL_S RO,W^WORKING_SET : AND SET TO DESIRED SIZE
0034   121 .
0034   122 .: LOCK INTO THE WORKING SET THE CODE AND DATA AREAS THAT SHOULD BE.
0034   123 .
0034   124 .: SLKWSET_S LOCKED_CODE
0042   125 .: $LKWSET_S LOCKED_DATA
0050   126 .
0050   127 .: EXPAND THE PROGRAM REGION BY ONE PAGE TO GET THE ADDRESS OF THE TOP.
0050   128 .: THIS PAGE WILL NEVER BE TOUCHED AND WILL THEREFORE REMAIN DEMAND ZERO.
0050   129 .
0050   130 .: SEXPREG_S #1,LAST_PAGE,REGION=#0
0064   131 .
0063   132 .: NOW TOUCH ALL PAGES UP TO THE ONE CREATED.
0063   133 .
50    00000200 9F  9E  0063 134 .: NOVAB #^X200,RO ; START WITH PAGE 1
50    00000200 60  D5  006A 135 10$: TSTL (RO) ; TOUCH IT
50    00000200 8F  F1  006C 136 .: ACBL LAST_PAGE,#^X200,RO,10$ ; NEXT PAGE AND LOOP
      FFF0  0078
      04    007A 137     RET

```

LOCKDN
V04-000

- LOCK FCP INTO REAL MEMORY

C 3

15-SEP-1984 23:44:02 VAX/VMS Macro V04-00
5-SEP-1984 01:13:31 [F11X.SRC]LOCKDN.MAR;1

Page 4
(2)

007B 138
007B 139
007B 140
007B 141

.END

LOCK
V04-

LOCKDN
Symbol table

- LOCK FCP INTO REAL MEMORY

D 3

15-SEP-1984 23:44:02 VAX/VMS Macro V04-00
5-SEP-1984 01:13:31 [F11X.SRC]LOCKDN.MAR;1

Page 5 (2)

SST1 = 00000000
ACL_TYPE = 00000007
AOB_TYPE = 00000005
BITMAP_TYPE = 00000001
CACHE_TYPE = 00000006
CHIP_TYPE = 00000008
DATA_TYPE = 00000004
DIRECTORY_TYPE = 00000002
FCB_TYPE = 00000000
HEADER_TYPE = 00000000
INDEX_TYPE = 00000003
LAST_PAGE 00000008 R 05
LCODE_END 00000000 R 02
LCODE_START 00000000 R 01
LDATA_END 00000000 R 04
LDATA_START 00000000 R 03
LOCKDOWN 00000010 RG 06
LOCKED_CODE 00000000 R 06
LOCKED_DATA 00000008 R 06
MVL_TYPE = 00000004
QUOTA_TYPE = 00000005
RVT_TYPE = 00000003
SET_SIZE 00000004 RG 05
SYS\$ADJWSL ***** GX 06
SYS\$EXPREG ***** GX 06
SYS\$BLKWSET ***** GX 06
VCB_TYPE = 00000002
WCB_TYPE = 00000001
WORKING_SET 00000000 R 05

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
LOCKEDC0\$	00000000 (0.)	01 (1.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC PAGE
LOCKEDC9\$	00000000 (0.)	02 (2.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC LONG
LOCKEDD0\$	00000000 (0.)	03 (3.)	NOPIC USR CON RFL LCL NOSHR NOEXE RD WRT NOVEC LONG
LOCKEDD9\$	00000000 (0.)	04 (4.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
LOCKEDD1\$	00000010 (16.)	05 (5.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SCODE\$	00000078 (123.)	06 (6.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC LONG

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.09	00:00:01.22
Command processing	113	00:00:00.67	00:00:02.92
Pass 1	121	00:00:01.00	00:00:03.25
Symbol table sort	0	00:00:00.02	00:00:00.02
Pass 2	40	00:00:00.55	00:00:01.23
Symbol table output	4	00:00:00.03	00:00:00.04
Psect synopsis output	2	00:00:00.04	00:00:00.05

LOCK
V04-
: Ro
: 3

LOCKDN
VAX-11 Macro Run Statistics

- LOCK FCP INTO REAL MEMORY

E 3

15-SEP-1984 23:44:02 VAX/VMS Macro V04-00
5-SEP-1984 01:13:31 [F11X.SRC]LOCKDN.MAR;1

Page 6
(2)

Cross-reference output 0 00:00:00.00 00:00:00.00
Assembler run totals 312 00:00:02.40 00:00:08.74

The working set limit was 1050 pages.

3647 bytes (8 pages) of virtual memory were used to buffer the intermediate code.

There were 10 pages of symbol table space allocated to hold 29 non-local and 1 local symbols.

242 source lines were read in Pass 1, producing 21 object records in Pass 2.

7 pages of virtual memory were used to define 7 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name

Macros defined

\$255\$DUA28:[SYS.OBJ]LIB.MLB;1
\$255\$DUA28:[SYSLIB]STARLET.MLB;2
TOTALS (all libraries)

0
5
5

41 GETS were required to define 5 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:LOCKDN/OBJ=OBJ\$:LOCKDN MSRC\$:\$CPPRE/UPDATE=(ENH\$:\$CPPRE)+MSRC\$:\$LOCKDN/UPDATE=(ENH\$:\$LOCKDN)+EXECMLS/LIB

LOCK
V04-

0171 AH-BT13A-SE
VAX/VMS V4.0

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